

Appl. No. : 10/800,814
Filed : March 15, 2004

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows. Additions are underlined; deletions are in ~~strikeout~~ text.

Please amend paragraph [0038] as follows:

[0038] The shaft 32 preferably is generally rectangular in cross-section and has opposing upper and lower walls 40, 42 and opposing side walls 44 extending between the upper and lower walls ~~40, 42~~. Preferably, the shaft 32 is substantially hollow and is constructed of composite materials such as fiberglass, carbon fiber and/or an aramid such as Kevlar. Most preferably, the composite construction comprises fibers entrained in a cured resin. It is to be understood that other types and combinations of materials can be used to construct the hockey stick shaft 32. For example, a hockey stick shaft can be constructed of wood, polymers, metals such as aluminum, and composite materials. Combinations of such materials can also be used.

Please amend paragraph [0048] as follows:

[0048] To manufacture the blade embodiment 90 depicted in Figures 5-7, the honeycomb cell structure 96 preferably is cut by machining, laser cutter, or any other acceptable method to generally approximate the shape of the blade core 92. In the illustrated embodiment, the blade 90 generally tapers from the heel 52 to the toe 50, thus the core 92 will be somewhat thicker at the heel 52 than at the toe 50. In some embodiments, the core 92 is somewhat thicker toward the bottom edge 76 ~~that than~~ toward the top edge 74.

Please amend paragraph [0051] as follows:

[0051] With continued reference to Figure 7, preferably the core 92 is configured so that cell walls 100 extend between the front and back laminate layers 64, 66 of the blade 90. As such, strike forces exerted on the front 70 of the blade are communicated through the cell walls 100 to the back laminate layer 66, and thus forces are distributed throughout the blade 90. Further, the cell structure 96 reinforces and contains the structural foam 98 so that upon extreme strikes, such as slap shots, the foam better resists crushing. As such, the blade core 92 is more durable and better supports the laminate 94. Accordingly, durability of the hockey stick blade 90 is increased.

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Please amend paragraph [0054] as follows:

[0054] With reference also to Figure 8, another embodiment of a blade 105 is shown in which the cell walls 100 do not extend substantially all the way between the front and back laminate layers 64, 66. In this embodiment, during curing of the blade composite outer layer 94, the structural foam 98 filling the cell structure 96 expands such that the foam becomes somewhat thicker than the cell walls 100. As such, the expanded foam 98 creates a space 108 between the cell walls 100 and the back laminate layer 66 so that the cell walls 100 do not reach substantially all the way to the back laminate layer 66. In the illustrated embodiment, the foam 98 is treated to selectively expand towards the back layer 66 rather than toward the front layer 64 so that the cell walls 100 substantially contact the front laminate layer 64 and most or all of the foam expansion beyond the cell walls 100 is directed generally toward the back of the blade 105. In this embodiment, forces are still communicated from the front laminate layer 64 to the back laminate layer 66. However, because the cell walls 100 substantially contact the front laminate layer 64, the cell structure 96 supports the front laminate layer to a greater extent than they it supports the back laminate layer.

Please amend paragraph [0055] as follows:

[0055] In order to construct the embodiment shown in with Figure 8, the foam-filled core 92 is treated to preferentially expand toward the back face 72 prior to enclosing the core 92 within the outer layer 94. During curing of the core, a curing layer tends to form on the foam 98. Preferably, prior to enclosing the core within a composite outer laminate layer 94, the back side of the foam core 98 is cut or roughened by sanding, machining or the like in order to weaken and/or remove the curing layer on the back of the foam core. Thus, if the foam 98 expands due to heat during final curing of the hockey stick blade, the foam will preferentially expand in the direction toward the roughened side. As such, foam expansion is substantially confined toward the back laminate layer 66 rather than toward the front laminate layer 64. More specifically, more foam expansion is directed adjacent and towards the back laminate layer than toward the front laminate layer. Accordingly, in a preferred embodiment there is less, if any, space 108 between the cell walls 100 and the front layer 64 than between the cell walls 100 and the back layer 66.

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Please amend paragraph [0061] as follows:

[0061] With reference next to Figures 12a and b, yet another embodiment of a hockey stick blade 160 is shown having a core 161 comprising ~~in which~~ a molded plastic cell structure 162. In the illustrated embodiment, the molded plastic cell structure 162 has a diamond pattern. Preferably the cell structure 162 is molded or cut to the desired blade shape and then filled with structural foam 164. The core 161 is then encased in a composite material 168 or other material that is suitable for a hockey stick blade.